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09/944,080	09/04/2001	Junko Fukuda	213304US6	1165

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ALEXANDRIA, VA 22314

EXAMINER
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CASCHERA, ANTONIO A

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 11/25/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/944,080

Applicant(s)

FUKUDA ET AL.

Examiner

Antonio A Caschera

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 04 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

### ***Specification***

2. The disclosure is objected to because of the following informalities:
  - a. The phrase, "It would be convenient, even the display body is folded..." is incomplete and should read something to this effect, "It would be convenient, when even the display body is folded..." (see page 2, lines 8-9).
  - b. The phrase, "...at a position so as to be operable even the back surface of the display body is at least close..." is incomplete and should read something to this effect, "...at a position so as to be operable when even the back surface of the display body is at least close..." (see page 3, lines 1-2).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1, 2, 8-10, 16-18, 24-26, 33 and 35, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154) in view of Lin et al. (U.S. Patent 6,552,738 B1).

In reference to claims 1 and 9, Bird discloses a compact computer having a base with an alphanumeric keyboard and a display screen pivotally connected to the base so that it can fold inwards towards the base or pivoted into a position facing away from the base (see lines 1-16 of abstract, Figure 1 and Figure 5). Bird also discloses a first operating means operable under the condition where the back surface of the display body is close to the base by using a stylus and touch screen display (see column 7, lines 4-14). Bird discloses the stylus to be used by a user to select an item from a menu being displayed on the touch screen display (see column 7, lines 38-40). Note, the office interprets the compact computer of Bird substantially similar in functionality to the information processing device of applicant's claims. Although Bird discloses the compact computer to comprise of a microcontroller along with memory devices (see column 3, lines 52-54), Bird does not explicitly disclose the compact computer executing application programs however, Lin et al. does. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see lines 1-6 of abstract). Lin et al. discloses the computer system including a stored software program for implementing the user interface (see column 4, lines 10-12). Note, the office interprets the multiple adjustments included with the user interface (see Figure 3 of Lin et al.) substantially similar to application programs. Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3). Lin et al. discloses the user providing input to the computer system to select one or more of the display settings for adjustment (see column 4, lines 46-51). Lin et al. also discloses a display controller

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managing data displayed on an output monitor (see column 3, lines 45-50). Neither Bird nor Lin et al. explicitly disclose an operating system executing application programs however, it is well known in the art of computing devices to include some sort of operating system on a computer. An operating system manages information processing on a computer while handling memory requirements, input/output devices, software applications and more (Official Notice). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an operating system to execute application programs with either the compact computer of Bird or the computer system of Lin et al. because it is well known in the art that operating systems are used to manage system resources, such as memory and input/output devices, to provide an efficient computing device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the compact computer of Bird with the user interface menu of Lin et al. in order to allow a user to make adjustments to settings of an output display to customize the computer environment to his/her preference utilizing an on-screen display adjustment lowering, production costs and creating a less confusing interface (see columns 1-2, lines 67-15 of Lin et al.).

In reference to claims 2, 10, 18 and 26, Bird and Lin et al. disclose all of the claim limitations as applied to claims 1, 9, 17 and 25 in addition, Bird also discloses a retractable keypad which, the office interprets, may be used under the condition where the back surface of the display body is close to the base (see column 2, lines 59-62, #40 of Figures 3 and 5). Bird does not explicitly disclose using the keypad to select a processing item to be executed from a system menu however it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a keypad to navigate and select a menu item as it is well known

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in the art that a keypad can also be used as a selectable input device (#8 key = up, #4 key = left, #6 key = right, #2 key = down and enter) (Official Notice). It would have been obvious to one of ordinary skill in the art for Bird to implement the retractable keypad as a selectable input device because it is well known in the art that a keypad can mimic the functions of a keyboard's directional arrow keys and also includes an enter key for making the selection.

In reference to claims 8, 16 and 24, Bird and Lin et al. disclose all of the claim limitations as applied to claims 1, 9 and 17 respectively. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see lines 1-6 of abstract). Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3).

In reference to claims 17 and 25, claims 17 and 25 are substantially similar to claims 1 and 9 above and therefore are rejected under similar rationale. Further, Lin et al. discloses selection of one processing item (interpreted as the adjustable attributes of the monitor display, shown in Figure 3, "Bright," "Contrast," etc.) configuring the display monitor (see column 4, lines 46-57 and Figure 3). Lin et al. discloses the displaying of more, fewer or different display parameters in the user interface (see column 4, lines 42-45) therefore, the office believes that it would have been obvious to one of ordinary skill in the art to include an output signal format display parameter in the user interface of Lin et al. to select between different/multiple format output display devices, i.e. NTSC, PAL, VGA etc. The office interprets the setting of the format of an output display signal substantially similar to a communication setting, between a display controller and display device, because of the definition of the term, "communicate" which reads, "(2) : to transmit information, thought or feeling so that it is satisfactorily received or

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understood,” (see *Merriam-Webster's Collegiate Dictionary*, 10<sup>th</sup> ed. Merriam-Webster, Inc. ©2002, page 232). The signal generating and receiving devices must operate on the same format signal so that signals are correctly understood and thus displayed accurately. Therefore, the office interprets such a communication setting as a second one of the processing items when displayed in the user interface of Lin et al.

In reference to claims 33 and 35, Bird and Lin et al. disclose all of the claim limitations as applied to claims 17 and 25 respectively above. Lin et al. discloses the user interface configuring screen brightness/luminance of a display device (see column 4, lines 51-54 and Figure 3).

4. Claims 3, 4, 11, 12, 19, 20, 27, 28, 32, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Lin et al. (U.S. Patent 6,552,738 B1) and in further view of Nishida et al. (U.S. Patent Des. 409,583).

In reference to claims 3 and 11, Bird discloses a compact computer having a base with an alphanumeric keyboard and a display screen pivotally connected to the base so that it can fold inwards towards the base or pivoted into a position facing away from the base (see lines 1-16 of abstract, Figure 1 and Figure 5). Bird also discloses a first operating means operable under the condition where the back surface of the display body is close to the base by using a stylus and touch screen display (see column 7, lines 4-14). Bird discloses the stylus to be used by a user to select an item from a menu being displayed on the touch screen display (see column 7, lines 38-40). Note, the office interprets the compact computer of Bird substantially similar in functionality to the information processing device of applicant's claims. Bird does not explicitly disclose the operation of the first operating means under a specific condition, for example

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photograph mode, however, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to utilize a certain operating means when the display body of a computer was inaccessible and then utilize an alternate operating means when it was accessible. Applicant has not disclosed that utilizing the first operating means under photograph mode provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the use of the stylus and touch screen when the back surface of the display body is close to the base because such an arrangement, shown in Figure 5 of Bird, is similar to the display arrangement found in applicant's drawings, Figure #7B. Further, the matter of when to operate the first operating means is seen as a matter of design choice as preferred by the designer and/or to which best suits the application at hand. Therefore, it would have been obvious to one of ordinary skill in this art to modify Bird to obtain the invention as specified in claims 3 and 11. Although Bird discloses the compact computer to comprise of a microcontroller along with memory devices (see column 3, lines 52-54), Bird does not explicitly disclose the compact computer executing application programs however, Lin et al. does. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see lines 1-6 of abstract). Lin et al. discloses the computer system including a stored software program for implementing the user interface (see column 4, lines 10-12). Note, the office interprets the multiple adjustments included with the user interface (see Figure 3 of Lin et al.) substantially similar to application programs. Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3). Lin et al. discloses the user providing input to the computer system to



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select one or more of the display settings for adjustment (see column 4, lines 46-51). Lin et al. also discloses a display controller managing data displayed on an output monitor (see column 3, lines 45-50). Neither Bird nor Lin et al. explicitly disclose an operating system executing application programs however, it is well known in the art of computing devices to include some sort of operating system on a computer. An operating system manages information processing on a computer while handling memory requirements, input/output devices, software applications and more (Official Notice). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an operating system to execute application programs with either the compact computer of Bird or the computer system of Lin et al. because it is well known in the art that operating systems are used to manage system resources, such as memory and input/output devices, to provide an efficient computing device. Neither Bird nor Lin et al. explicitly disclose a photographing case having a photographic function however Nishida et al. does. Nishida et al. discloses a laptop computer with an integrated camera attached thereto (see Figures 13-15 of Nishida et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the compact computer of Bird and the user interface of Lin et al. with the laptop and camera attached thereto of Nishida et al. in order to allow the user to view the display screen while taking a photograph of someone/something or adjusting display settings, creating a more efficient and user friendly computer environment. Further, it is well known in the art of video camcorders to implement the pivotal display/camera feature of Nishida et al. thus allowing for the operator to view what the camcorder records without looking into the viewfinder (eyepiece).

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In reference to claims 4, 12, 20 and 28, Bird, Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claims 3, 11, 19 and 27 respectively. Claims 4, 12, 20 and 28 are substantially similar to claim 2 and therefore are rejected under similar rationale. Further, the operation of the keypad for a specific condition, for example photograph mode, is a matter of design choice as seen by the office as the keypad is retractable, going into the side of the base, and therefore is still very accessible to the user while the back face of the display screen is close to the base.

In reference to claims 19 and 27, claims 19 and 27 are substantially similar to claims 3 and 11 above and therefore are rejected under similar rationale. Further, Lin et al. discloses selection of one processing item (interpreted as the adjustable attributes of the monitor display, shown in Figure 3, "Bright," "Contrast," etc.) configuring the display monitor (see column 4, lines 46-57 and Figure 3). Lin et al. discloses the displaying of more, fewer or different display parameters in the user interface (see column 4, lines 42-45) therefore, the office believes that it would have been obvious to one of ordinary skill in the art to include an output signal format display parameter in the user interface of Lin et al. to select between different/multiple format output display devices, i.e. NTSC, PAL, VGA etc. The office interprets the setting of the format of an output display signal substantially similar to a communication setting, between a display controller and display device, because of the definition of the term, "communicate" which reads, "(2) : to transmit information, thought or feeling so that it is satisfactorily received or understood," (see *Merriam-Webster's Collegiate Dictionary*, 10<sup>th</sup> ed. Merriam-Webster, Inc. ©2002. page 232). The signal generating and receiving devices must operate on the same format signal so that signals are correctly understood and thus displayed accurately. Therefore, the

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office interprets such a communication setting as a second one of the processing items when displayed in the user interface of Lin et al.

In reference to claim 32, Bird, Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claim 27 above. Lin et al. discloses a method and apparatus providing a user interface for control of a display device via a computer system (see lines 1-6 of abstract). Lin et al. also discloses the user interface resembling a system menu showing adjustable items to tweak display settings (see column 4, lines 30-36 and Figure 3).

In reference to claims 34 and 36, Bird, Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claims 19 and 27 respectively above. Lin et al. discloses the user interface configuring screen brightness/luminance of a display device (see column 4, lines 51-54 and Figure 3).

5. Claims 5, 13, 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Lin et al. (U.S. Patent 6,552,738 B1) and further in view of Someya et al. (U.S. Patent 6,546,231 B1).

In reference to claims 5, 13, 21 and 29, Bird and Lin et al. disclose all of the claim limitations as applied to claims 2, 10, 18 and 26 respectively above. Bird discloses the stylus and touch screen to be operated by pressing the tip against the display screen (see column 7, lines 38-40). Neither Bird nor Lin et al. explicitly disclose the keypad, or second operating means, to be rotated however Someya et al. does. Someya et al. discloses a communication terminal device implementing an operation key designed to be rotated, pushed or slid (see lines 1-8 of abstract of Someya et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the "jog dial", of Someya et al., that can be rotated and pushed

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with the compact computer of Bird and the user interface of Lin et al. in order to provide a convenient user input device creating a fast and easy way to select items in a menu, for example (see column 2, lines 31-36 of Someya et al.).

6. Claims 6, 14, 22 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Lin et al. (U.S. Patent 6,552,738 B1), Nishida et al. (U.S. Patent Des. 409,583) and further in view of Someya et al. (U.S. Patent 6,546,231 B1).

In reference to claims 6, 14, 22 and 30, Bird, Lin et al. and Nishida et al. disclose all of the claim limitations as applied to claims 4, 12, 20 and 28 respectively above. Bird discloses the stylus and touch screen to be operated by pressing the tip against the display screen (see column 7, lines 38-40). Bird, Lin et al. and Nishida et al. do not explicitly disclose the keypad, or second operating means, to be rotated however Someya et al. does. Someya et al. discloses a communication terminal device implementing an operation key designed to be rotated, pushed or slid (see lines 1-8 of abstract of Someya et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the "jog dial", of Someya et al., that can be rotated and pushed with the compact computer Bird, user interface of Lin et al. and laptop/camera design of Nishida et al. in order to provide a convenient user input device creating a fast and easy way to select items in a photographic menu, for example (see column 2, lines 31-36 of Someya et al.).

7. Claims 7, 15, 23, and 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Lin et al. (U.S. Patent 6,552,738 B1) and in further view of Boyce ("Microsoft Windows NT Workstation 4.0 User Manual", 1999).

In reference to claims 7, 15, 23 and 31, Bird and Lin et al. disclose all of the claim limitations as applied to claims 1, 9, 17 and 25 respectively above. Neither Bird nor Lin et al. explicitly disclose the display control means canceling a display of a system menu where the first operation means is operated while said system menu is displayed. Boyce discloses a manual for Microsoft Windows NT Workstation 4.0 wherein Boyce describes the, "Start Menu" (see page 26 of Boyce). Boyce discloses the, "Start Menu" being the primary method for starting programs in the Windows environment (see page 26 of Boyce). Although Boyce does not explicitly disclose the, "Start Menu" erasing or clearing after choosing an application to run or file to open, it is well known in the computer art, in particular operating systems and graphical user interfaces, that the "Start Menu" in Microsoft Windows is cancelled after a selection of running an application or opening a file is chosen. Note, the "touch" action of the stylus to the touch screen as disclosed by Bird is interpreted as substantially similar in functionality to the clicking action of a mouse button. It would have been obvious to one of ordinary skill in the art to implement the menu displaying techniques disclosed by Boyce with the compact computer of Bird and user interface of Lin et al. in order to allow the user access to icons or other information arranged on the Windows Desktop that may have been covered by the displayed "Start Menu."

### ***Response to Arguments***

8. The addition of claims 9-36 is noted.
9. Applicant's arguments, see page 20 of. "Applicant's Remarks", filed 9/15/2003, with respect to the specification, have been fully considered and are persuasive. Some minor informalities have been corrected within the specification however, the specification still suffers

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from minor informalities (see above) and therefore, an objection to the specification is maintained. Note, the new title of the application has been considered and accepted.

10. Applicant's arguments, see page 20 of. "Applicant's Remarks", filed 9/15/2003, with respect to the drawings, have been fully considered and are persuasive. The specification has been amended to include #12 of Figure 1 therefore, the objection to the drawings has been withdrawn.

11. Applicant's arguments, see page 20 of. "Applicant's Remarks", filed 9/15/2003, with respect to the objection of claims 1, 3 and 8, have been fully considered and are persuasive. Minor informalities have been corrected within these claims therefore, the objection to claims 1, 3 and 8 has been withdrawn.

12. Applicant's arguments, see page 21 of. "Applicant's Remarks", filed 9/15/2003, with respect to the 35 U.S.C. § 112, 2<sup>nd</sup> paragraph rejection of claim 8, have been fully considered and are persuasive. Claim 8 has been amended to include antecedent basis for the term, "GUI," therefore, the 35 U.S.C. § 112, 2<sup>nd</sup> paragraph rejection of claim 8 has been withdrawn.

13. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

#### *References Cited*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Miyagawa et al. (U.S. Patent 5,594, 619)

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- Miyagawa et al. discloses a portable computer able to pivot its display in various ways, placing the computer in different operating modes based on the pivoted position.
- b. Rector (U.S. Patent 6,590,596 B1)
  - Rector discloses a method, user interface and system configured to present a task bar content to a user in an activated menu.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (703) 305-1391. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (703)-308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

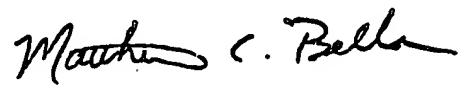
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

aac

11/14/03



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600